

Recorded water levels in this bulletin are derived from a representative network of water level gages on each lake (see cover map). Providers of these data are the National Ocean Service, National Oceanic and Atmospheric Administration, U.S. Department of Commerce, and the Marine Environmental Data Service, Department of Fisheries and Oceans, Canada. The Detroit District, Corps of Engineers and Environment Canada derive historic and projected lake levels under the auspices of the Coordinating Committee on Great Lakes Basic Hydraulic and Hydrologic Data.

This bulletin is produced monthly as a public service. Tables of possible storm-induced rises at key locations on the Great Lakes are available on request. The Corps also publishes the "Great Lakes, Connecting Channels and St. Lawrence River Water Levels and Depths," twice monthly, which provides a forecast of depths in the connecting rivers between the Great Lakes and the International Section of the St. Lawrence River. These publications can be obtained free of charge by writing to the address shown on the front cover, or by calling (313) 226-6441. Notices of change of address should include the name of the publication(s). The Internet address <http://www.lre.usace.army.mil/glhh> also contains this information.

## Great Lakes Basin Hydrology January 2009

Preliminary precipitation for January was well below average across the entire Great Lakes basin, with Lake Superior seeing only about a third of its average, while Lake Michigan-Huron received about half of its average precipitation. The Lakes Erie and Ontario basins saw about two-thirds of their average precipitation. Over the course of the past year, the Great Lakes basin experienced above average precipitation. The net supply of water to Lake Superior was near average while the net supply to Lakes Michigan-Huron was above average. Lake Erie received less than its average net supply of water. Lake Ontario's net supply of water was above average. Outflows from Lakes Superior and Michigan-Huron were below normal, while Lake Erie had slightly above average outflows. Lake Ontario outflow was near average. The tables below list January precipitation, water supply, and outflow information for the entire Great Lakes basin.

Comparison of January monthly mean water levels to long-term (1918-2007) average shows that Lakes Superior and Michigan-Huron were 8 and 12 inches below average, respectively. Lakes St. Clair and Erie were 4 and 2 inches above average, respectively, while Lake Ontario's level was 8 inches above its long-term average.

PRECIPITATION (INCHES)								
BASIN	January				12-Month Comparison			
	2009	Average (1900-2006)	Diff.	% of Average	Average Last 12 months	Average (1900-2006)	Diff.	% of Average
Superior	0.76	1.96	-1.20	39	31.28	30.45	0.83	103
Michigan-Huron	1.12	2.13	-1.01	53	35.56	32.30	3.26	110
Erie	1.62	2.47	-0.85	66	40.44	35.28	5.16	115
Ontario	1.93	2.75	-0.82	70	40.23	35.65	4.58	113
Great Lakes	1.19	2.20	-1.01	54	35.91	32.53	3.38	110

LAKE	January WATER SUPPLIES <sup>2</sup> (cfs)		January OUTFLOW <sup>3</sup> (cfs)	
	2009 <sup>1</sup>	Average <sup>5</sup> (1900-1999)	2009 <sup>1</sup>	Average <sup>4</sup> (1900-1999)
Superior	-15,000	-13,000	56,000	69,000
Michigan-Huron	80,000	58,000	149,000	160,000
Erie	8,000	25,000	199,000	192,000
Ontario	42,000	32,000	221,000	222,000

Notes: Values (excluding averages) are based on preliminary computations. CFS denotes cubic feet per second.

<sup>1</sup> Estimated

<sup>2</sup> Negative water supply denotes evaporation from lake exceeded runoff from local basin.

<sup>3</sup> Does not include diversions.

<sup>4</sup> Niagara and St Lawrence rivers average outflows are based on period of record 1900-1989 and 1900-2005, respectively

<sup>5</sup> Lakes Erie and Ontario average water supplies based on 1900-1989